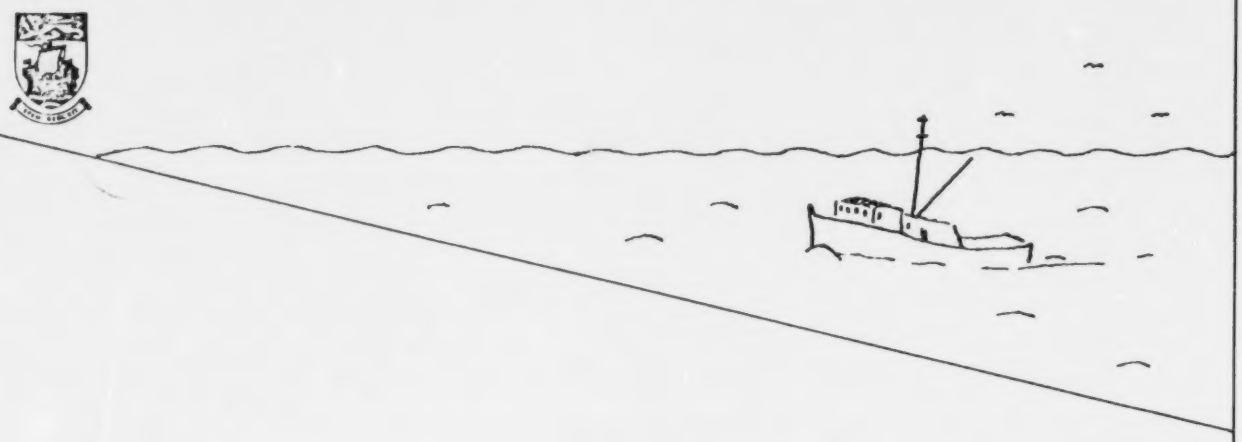

OPERATIONS OF SELECTED BOATS NEW BRUNSWICK NORTH AND SOUTHEAST SHORES

1979

Eudore Dugas
Planning and Co-ordination
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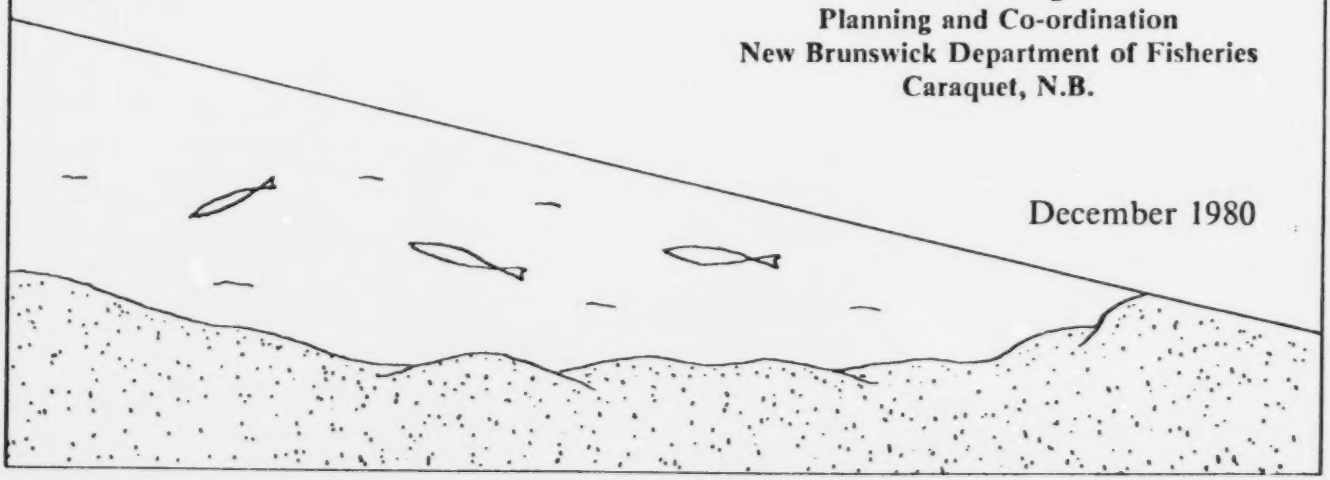
Caraquet, N.B.



December 1980

FOREWORD

For several years now, the Planning and Co-ordination Branch of the New Brunswick Department of Fisheries has conducted studies on the economic viability of various sectors of the fishing fleet. Those studies, first conducted in Region 1 (Northeast), were carried out for the first time this year in Region 11 (Southeast). Consequently, we propose to extend our research activities to the Bay of Fundy (Region 111) next year, in order to obtain comprehensive results which will represent the condition of our fleet and to provide an important working tool for all those directly or indirectly involved in the fisheries industry.

The sampling for the study of the 1979 fishing season includes forty-one fishing boats selected from various regions on the North and Southeast shores of the province. These boats used different types of fishing gear and were selected so as to represent the reality of the fishing fleet as accurately as possible for the various groups concerned.

It should be noted that these boats all belong to captains who are either sole owners, co-owners, or owners with majority control in a limited company. These owners with majority control are responsible for all fishing activities and for the degree of success of the entreprise.

We were able to accomplish this work through the excellent co-operation of the captains and of all those interviewed. Representatives of processing plants and of the provincial and federal Departments of Fisheries supported this project, in particular, Mr. Peter Hart of the federal Department of Fisheries and Oceans, and the author of this document, Mr. Eudore Dugas, of the New Brunswick Department of Fisheries in Caraquet.

To all these people and to all who co-operated, either directly or indirectly, I would like to express my sincere thanks.

Denis Haché
Director, Planning and Co-ordination

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1. INTRODUCTION

The proposed program for 1979 included over sixty (60) fishing boats, only forty-one (41) of which are included in this study. The short time available to complete this project is the principal reason for restricting the number of boats. It was necessary to eliminate from the program the inshore boats in certain regions such as Pointe Sapin, Buctouche, and Cap Pelé. Also, the results of certain boats such as the 85' boats which fished primarily groundfish and used different types of fishing gear (pelagic or groundfish trawls) were not suitable for inclusion in this study.

The fishing enterprises studied are grouped into different classes according to the type of fishing gear used, the length of the boat, and even to the various fishing regions. From three to six enterprises are represented for each class studied.

The inshore boats (boats less than 50 feet in length) are grouped by fishing regions and are identified by a corresponding number and the name of the region involved.

1. Stonehaven-Maisonnette
2. Caraquet
3. Lamèque-Shippegan
4. Val Comeau-Néguac
5. Baie Ste Anne

6. Richibucto

7. Cape Tourmentine

For the purpose of the study, these groups are considered as lobster boats, with the exception of group No. 2 for the Caraquet region, which represents herring boats, that is, boats whose principal activity was to fish herring.

The offshore boats, are grouped mainly according to the type of fishing gear used: crab pots, Scottish seines, shrimp trawls, or purse seines (herring seiners). They are all from north shore of the province.

2. DESCRIPTION

Table 1 indicates the characteristics and the number of boats included in each sample group.

Table 1 - Description of boats studied
New Brunswick north and southeast shores

Region and type of boat	Boats included in the sample	Hull	Average per boat		
			Age	(1) L.O.A*	Gross tonnage
	(number)		(years)	(feet)	
Inshore boats					
1- Stonehaven-Maisonnette	6	wood	8	30	6
2- Caraquet	3	wood	8	47	19
3- Lamèque-Shippegan	4	wood	2	35	9
4- Val Comeau-Néguac	5	wood	7	44	12
5- Baie Ste Anne	3	wood	4	40	9
6- Richibucto	3	wood	5	43	13
7- Cape Tourmentine	3	wood	5	44	13
Offshore boats					
8- Crab boats	4	wood	11	64	57
9- Scottish seiners	3	wood	7	64	58
10- Shrimp boats	4	wood	15	85	126
11- Herring seiners	3	steel	12	(2)106	307

(1) L.O.A: Length overall

(2) Includes tow dimensions, that is, 115' and 87'.

The average age of the inshore boats is 5.8 years and varies from 1 to 15 years.

Of the offshore boats, the shrimp boats have the highest average age, that is, 15 years. The offshore boats vary in age from 6 to 20 years.

Table 2 - Electronic equipment used

Region and Type of baot	Number of boats in sample	Number of boats equipped with					
		Sounder	Sonar	Radio Telephone	Loran	Radar	Decca Navigator
Inshore boats							
1- Stonehaven-Maisonnette	6	2		4			
2- Caraquet	3	5		6			
3- Lamèque-Shippegan	4	3		4			
4- Val Comeau-Néguac	5	4		5			
5- Baie Ste Anne	3	2		3			
6- Richibucto	3	3		3			
7- Cape Tourmentine	3	3		3			
Offshore boats							
8- Crab boats	4	9		6	4	7	3
9- Scottish seiners	3	6		8	4	6	2
10- Shrimp boats	4	8		16	4	7	4
11- Herring seiners	3	6	9	16	3	6	3
Total		51	9	74	15	26	12

Almost all the boats are equipped with radio-telephone service, which include General Radio Service (Citizens Band or C.B.). In all, the boats studied have the following devices:

51 sounders

9 sonars

74 radio-telephones

15 lorans

26 radars

12 Decca navigators

Certain offshore boats are also equipped with automatic pilots.

3. OPERATIONAL PERFORMANCE

The twenty-seven (27) inshore boats included in the study for 1979 landed a total of 1,735,577 pounds of fish, which included twelve (12) different species (Table 3a.). Lobster accounted for 10.7% of the total landings and 56.4% of the total landed value, while herring represented 49.1% of the landings and 21.5% of the total landed value. The other species were of lesser importance. The average price received for all species was 31.21¢ per pound.

Fourteen (14) offshore boats were included in the study, that is, crab boats, Scottish seiners, shrimp boats, and herring seiners. These boats landed a total of 24,164,468 pounds of fish during the 1979 season for a corresponding value of $3,848,719.91 (Table 3b). Herring accounted for 60.9% of the total landings and 43.7% of the total landed value. Cod, shrimp, and crab accounted for 15.3%, 6.7% and 8.6% of the total landings respectively, and 14.9%, 16.3% and 19.1% of the total landed value. The average price received for all species was 15.95¢ per pound.

Table 3(a) - Total landings, total landed value and average prices per species for inshore boats (lobster and herring) - 1979

Species	Total landings	Percentage of total	Total landed value	Percentage of total	Average prices received
	lbs	%	$	%	¢
Lobster	186,031	10.7	305,819.26	56.4	164.39
Herring	852,269	49.1	116,645.23	21.5	13.69
Mackerel	251,668	14.5	28,669.28	5.3	11.39
Cod	166,061	9.6	29,090.17	5.4	17.52
Plaice	52,115	3.0	5,505.42	1.0	10.56
Hake	109,446	6.3	14,482.16	2.7	13.23
Shad	65	Ø	25.00	Ø	38.46
Salmon	1,101	0.1	2,561.00	0.5	232.61
Alewife	104,375	6.0	4,309.74	0.8	4.13
Skate	35	Ø	7.00	Ø	20.00
Scallop	10,662	0.6	32,952.85	6.1	309.07
Scallop roe	649	Ø	1,622.50	0.3	250.00
Unclassified*	1,100	0.1	22.00	Ø	2.00
Totals	1,735,577	100.0	541,711.61	100.0	31.21

Ø less than one half of one unit

* Unclassified means certains species classified by buyers as being of inferior quality.

Table 3(b) - Total landings, total landed value and average prices per species for offshore boats in 1979

Species	Total landings	Percentage of total	Total landed value	Percentage of total	Average prices received
	lbs	%	$	%	¢
Cod	3,693,505	15.3	574,439.72	14.9	15.55
Haddock	18,155	0.1	4,814.47	0.1	26.52
Pollock	1,615	Ø	145.35	Ø	9.00
Hake	95,486	0.4	6,962.56	0.2	7.29
Halibut	764	Ø	1,169.30	0.1	153.05
Turbot	101,586	0.4	9,791.86	0.3	9.64
Plaice	1,266,716	5.2	159,683.88	4.1	12.61
Catfish	250	Ø	25.71	Ø	10.28
Redfish	335,617	1.4	43,546.95	1.1	12.98
Herring	14,704,740	60.9	1,683,059.01	43.7	11.45
Caplin	135,400	0.6	3,046.50	0.1	2.25
Shrimp	1,617,719	6.7	625,419.54	16.3	38.66
Crab	2,094,661	8.6	734,937.30	19.1	35.09
Unclassified*	98,254	0.4	1,677.76	Ø	1.71
Totals	24,164,468	100.0	3,848,719.91	100.0	15.93

Ø less than one half of one unit

* unclassified means all species of inferior quality classified by buyers for the production of fish meal.

A detailed analysis for each group studied, including both inshore and offshore boats, appears in the Appendix of this report. It reveals the general tendencies of each of the groups in regard to the landed volume and values, the price received per species, and the percentage distributions of volume and landed values (Tables 2a to 6a and 2b to 6b in the Appendix).

Table 4, which follows, gives the results of the activities of various fishing boats as they relate to landings and landed values.

Table 4 - Average operational performance of fishing boats - 1979

Region and type of boat	Averages by region or type of boat							
	L.O.A*	Men in crew	Trips	Days at sea	Days fished	Hours fished	Landings	Landed value
	feet	number	number	number	number	number	pounds	$
Inshore boats								
1- Stonchaven-Maisonnette	30	2.0	88	88	88	(1)687	50,744	17,632
2- Caraquet	47	3.6	58	87	58	(1)266	140,453	20,130
3- Lamèque-Shippegan	35	2.0	75	75	75	(1)655	47,181	18,713
4- Val Comeau-Néguac	44	2.0	72	72	72	(1)572	26,049	16,467
5- Baie Ste Anne	40	2.3	92	92	92	(1)704	71,046	25,532
6- Richibucto	43	2.1	100	100	100	(1)794	110,292	25,241
7- Cape Tourmentine	44	2.3	86	86	86	(1)995	48,924	22,008
Offshore boats								
8- Crab boats	64	4.0	40	103	63	(2)933	523,665	183,734
9- Scottish Seiners	64	4.8	33	120	91	1,378	1,249,711	184,880
10- Shrimp boats	85	4.3	18	153	118	1,794	857,124	217,999
11- Herring seiners	106	8.7	38	64	52	(3)	4,964,060	562,382

* L.O.A.: length overall
(1) Average number of hours fished for all types of fish
(2) Number of hours to haul up, bail, and set traps
(3) An average of 80 sets were done per boat; only the number of hours fished varies considerably with the volume of the catch

The data in Table 5 compare the operational efficiency for the various groups of boats. The herring seiners gave the best performance in regard to volume per man, that is, 570,582 pounds, and also in regard to the value of production per men, that is, $64,642.00 for the fishing season. For each trip at sea, these boats also gave the best performance in regard to the quantity of landings and the landed value; that is, 129,508 pounds and a landed value of $14,672.00.

Table 6 on page 13 provides information similar to the preceding table, but in greater detail, by giving a comparative statement of the average rate of output per hour fished and per man-day at sea per boat. According to this table, the average rate of output by volume per hour fished varied from 46 to 907 pounds, and the average output per man-day at sea varied from 180 to 9,120 pounds, representing values of $114.00 and $1,033.00 respectively per man-day at sea.

Most of the inshore boats do various types of fishing during the season, that is, lobster, herring, or other fishing. Different types of fishing may be carried out simultaneously (lobster and mackerel fishing), although most of the time, one type of fishing follows another. It is important to know, in these circumstances, the fishing effort which took place for

Table 5 - Operational efficiency of fishing boats - 1979

Region and type of boat	L.O.A.	Averages by region or type of boat					
		Landings per			Landed value per		
		Man (1)	Trip (2)	Day at sea	Man (1)	Trip (2)	Day at sea
	feet	lbs	lbs	lbs	$	$	$
Inshore boats							
1- Stonehaven-Maisonnette	30	25,372	574	574	8,816	200	200
2- Caraquet	47	39,233	2,435	1,621	5,623	349	232
3- Lamèque-Shippegan	35	23,591	631	631	9,357	250	250
4- Val Comeau-Néguac	44	13,025	361	361	8,233	228	228
5- Baie Ste Anne	40	30,623	772	772	11,055	278	278
6- Richibucto	43	51,780	1,099	1,099	11,850	252	252
7- Cape Tourmentine	44	21,744	569	569	9,781	256	256
Offshore boats							
8- Crab boats	64	130,916	13,174	5,109	45,934	4,622	1,793
9- Scottish seiners	64	260,357	37,870	10,386	38,517	5,602	1,536
10- Shrimp boats	85	199,331	47,618	5,602	50,697	12,111	1,425
11- Herring seiners	106	570,582	129,508	77,563	64,642	14,672	8,787

(1) Man per fishing season

(2) Per boat

Table 6 - Average rate of output - 1979

Region and type of boat	Crew members	Averages			
		Output per hour fished		Output per man-day at sea	
		Landings	Value	Landings	Value
	number	pounds	$	pounds	$
Inshore boats					
1- Stonehaven-Maisonnette	2.0	74	26	287	100
2- Caraquet	3.6	528	76	453	65
3- Lamèque-Shippegan	2.0	71	28	316	125
4- Val Comeau-Néguac	2.0	46	29	180	114
5- Baie Ste Anne	2.3	101	36	332	119
6- Richibucto	2.1	139	32	515	118
7- Cape Tourmentine	2.3	49	22	252	113
Offshore boats					
8- Crab boats	4.0	561	197	1,277	448
9- Scottish seiners	4.8	907	134	2,199	325
10- Shrimp boats	4.3	478	122	1,315	334
11- Herring seiners	8.7	Ø	Ø	9,120	1,033

Ø Not available

each type of fishing and to determine as accurately as possible the fishing hours intended for each type.

Table 7 presents the average hours of fishing for the main types of fishing by region and by boat. The lobster-fishing hours represent over 50% of the total hours fished, that is, a general average of 368 hours out of a total of 664 hours.

The average rate of output for the main types of fishing appears in Table 8. Alweife may be fished as an accidental catch in herring nets or as the main catch in alewife nets. It should be noted, furthermore, that plaice, hake, and cod can be fished either with a net, jigger or a trawl-net. Table 8 does not however take these different methods into consideration. According to that table Baie Ste Anne region has the highest rate of output for lobster fishing.

Table 7 - Hours fished for main types of fishing-inshore boats - 1979

Boat by region	Average hours fished						
	Lobster	Herring	Mackerel Alewife and Herring(1)	Plaice Hake Cod	Alewife only	Scallop	Total
1- Stonehaven-Maisonnette	390	127	120	50			687
2- Caraquet		245		21			266
3- Lamèque-Shippegan	420	64	86	95			665
4- Val Comeau-Néguac	446		107	19			572
5- Baie Ste Anne	427	135	33	109			704
6- Richibucto	376	68		202	28	120	794
7- Cape Tourmentine	427		4	163		401	995
General (2) average	368.0	87.5	63.4	83.8	3.1	57.9	663.7

(1) Accidental catches of alewife and herring in mackerel nets

(2) General average applied to the 27 inshore boats included in this study.

Table 8 - Average rate of output for main types of fishing-inshore boats - 1979

Boat by region	Average landings and landed values per hour fished											
	Lobster		Herring		Makcerel Alewife Herring (1)		Plaice Hake Cod		Alewife		Scallops	
	lbs	$	lbs	$	lbs	$	lbs	$	lbs	$	lbs	$
1- Stonehaven-Maisonnette	19	32	150	20	178	18	55	8				
2- Caraquet			519	73			626	100				
3- Lamèque-Shippegan	18	29	281	43	128	16	113	23				
4- Val Comeau-Néguac	19	32			148	16	73	14				
5- Baie Ste Anne	22	36	361	56	210	27	54	10				
6- Richibucto	20	31	657	66			143	23	1,003	42	9	28
7- Cape Tourmentine	14	22			313	31	240	26			6	19

(1) Accidental catch of alewife and herring in mackerel nets

Another measure of efficiency which may apply to boats, is the relationship between total investment and output, which may be important for those testing new types of fishing vessels and even for governments which finance and grant subsidies to fishing boats (Table 9). For the boat owner, the relationship between the net investment and output is of the utmost importance.

According to Table 9, the most favorable relationship was provided by the inshore boats of Cape Tourmentine. For each $100.00 that the owner invested in his enterprise, he received average total receipts of $136.60.

Table 10, which is found on page 19, gives the average rate of output per man by indicating the relationship between the investment and output per man.

This ratio shows that for each $100.00 of investment, the group of Cape Tourmentine boats produced a value of $136.60 of fish per man.

Table 9 - Relationship between investment and output - 1979

Region and type of boat	L.O.A.	Average investment per boat		Average total receipts per boat (3)	Relationship between average total receipts and	
		Total(1)	Net(2)		average total investment	net average investment
	feet	$	$	$	%	%
Inshore boats						
1- Stonehaven-Maisonnette	30	17,840	17,203	17,632	98.8	102.5
2- Caraquet	47	38,449	35,397	20,130	52.3	56.9
3- Lamèque-Shippegan	35	20,178	18,008	19,705	97.7	109.4
4- Val Comeau-Néguac	44	18,437	15,471	17,490	94.9	113.1
5- Baie Ste Anne	40	22,644	19,793	25,716	113.6	129.9
6- Richibucto	43	25,590	20,704	25,606	100.1	123.7
7- Cape Tourmentine	44	20,470	16,114	22,008	107.5	136.6
Offshore boats						
8- Crab boats	64	219,529	166,561	183,734	83.7	110.3
9- Scottish seiners	64	270,248	184,134	184,963	68.4	100.5
10- Shrimp boats	85	258,112	233,750	217,999	84.4	93.3
11- Herring seiners	106	744,458	733,458	562,436	75.5	76.7

(1) Total investment includes the initial or transfer cost of the boat, the cost of catching gear, all subsequent major improvements, and the value of rented equipment.

(2) Net investment does not include the subsidy granted during construction or the value of rented equipment.

(3) Total receipts include the sale of fish, other receipts such as rebates or others.

Table 10 - Relationship between investment and output per man - 1979

Region and type of boat	Average per men			Relationship between output and investment per man	
	Total investment	Net Investment	Landed value(1)	Total	Net
	$	$	$	%	%
Inshore boats					
1- Stonehaven-Maisonnette	8,920	8,602	8,816	98.8	102.5
2- Caraquet	10,680	9,833	5,592	52.4	56.9
3- Lamèque-Shippegan	10,089	9,004	9,357	92.7	103.9
4- Val Comeau-Néguac	9,219	7,736	8,233	89.3	106.4
5- Baie Ste Anne	9,845	8,606	11,101	112.3	129.0
6- Richibucto	12,186	9,859	12,020	98.6	121.9
7- Cape Tourmentine	8,900	7,006	9,569	107.5	136.6
Offshore boats					
8- Crab boats	54,882	41,640	45,934	83.7	110.3
9- Scottish seiners	56,302	38,361	38,517	68.4	100.4
10- Shrimp boats	60,026	54,360	50,697	84.5	93.3
11- Herring seiners	85,570	84,306	64,642	75.5	76.7

(1) Includes the sale of fish and not "other receipts"

4. RETURNS TO LABOUR AND CAPITAL

a) Returns to labour

Inshore boat owners hire helpers who are paid set wages or sometimes hire crew members who are paid according to a sharing system such as 25% of the value of the catch or $5.00 per barrel. As to owners themselves, they have no definite method of salary payments; instead they deduct, as needed certain amounts from net boat share.

This practice is not much recommended in the management of an enterprise; certain financial results cannot be known precisely because it is impossible to calculate the net revenue of the boat.

As we know that the owner needs a certain salary coming from his enterprise, it is preferable and more equitable to use a certain method of calculating an average salary for the captain rather than to simply take nothing into consideration and to make no deductions.

Although there is no perfect method of calculation, it seems that a weekly fixed salary rate multiplied by a given number of weeks would provide a reasonable estimate for an average captain salary of an inshore boat.

Table 11 indicates the average net return per man during the season according to duty he performed as crew member. The average

salary for the captain of an inshore boat is calculated at a rate of $250.00 per week multiplied by the average number of weeks in the fishing season for each of the groups concerned (See Table 1 in the appendix for the number of weeks in the fishing season). Three weeks in the spring for repairs are also added to the number of weeks in the fishing season for all groups concerned. Thus, the average salary of the captain in the Stonehaven group would be $250.00 x (20 plus 3) for a total of $5,750.00.

The salaries of the first helper on inshore boats vary from $125.00 to $300.00 per week, with a general average of $175.00 per week. According to Table 11, the highest average salary for the first helper is in the Richibucto group, that is, $4,910.00 for the fishing season.

As for the second and third helpers, they are rare; that is, of the 27 inshore boats, eight has a second helper and 5 had a third helper.

Workers on crab receive a salary based on the value of catches, sharing 60% as crew share and 40% as boat share. In general, there is no commission in addition to share wages.

Scottish seiners generally have approximately the same sharing system as crab boats, that is, 60% as crew share and 40% as boat share. Crew expenses include fuel, ice, food, and

unloading. Table 11 shows that a crew member on a Scottish seiner may receive an average salary of $19,053.00 for the fishing season.

The sharing system is different on shrimp boats. The crew share is 37% and the boat share is 63%. Crew expenses usually include only food and unloading. Since these boats are larger, it is important to have qualified crew members. That is why, in addition to the share salary, there are commissions for the captain, the engineer, and even for the cook and iceman.

These commissions are based either on a percentage of the value of the catch, or on a given rate for each day at sea. The captain of a shrimp boat may earn an average of $24,491.00 for the fishing season (Table 11).

Herring seiners also have a sharing system which differs greatly from that of other types of boats. In general, 2% of the value of the catch represents contribution to the Seiners Association. The remainder may be divided as follows: 40% as crew share and 60% as boat share. Food is considered to be a crew expense. In addition to the sharing salary, there are commissions payable to the captain, the engineer, the boatsain, the cook, and the skiffman. These commissions, based on a certain percentage of the value of the catch, are deducted from either the boat share or the crew share, and in this case, are considered to be a crew expense.

Table 11 indicates the possible average salaries for the captain and the other crew members for a fishing season.

Table 12, on page 25, shows the average net income per man-day at sea.

Table 11 - Average net returns per man per fishing season - 1979

Region and type of boat	Days at sea	Crew categories							
		Captain	Chief Engineer	Boatswain	Cook	Iceman	Skiff-man	Deck-hand	1st Helper (1)
Inshore boats									
1- Stonehaven-Maisonnette	88	5,750							2,429
2- Caraquet	87	4,250							3,938
3- Lamèque-Shippegan	75	5,250							4,402
4- Val Comeau-Néguac	72	4,250							2,518
5- Baie Ste Anne	92	6,000							2,863
6- Richibucto	100	6,000							4,910
7- Cape Tourmentine	86	7,500							2,962
Offshore boats									
8- Crab boats	103	22,685						20,497	
9- Scottish seiners	120	19,053						19,053	
10- Shrimp boats	153	24,491	17,869		17,553	17,112		16,873	
11- Herring seiners	64	57,386	31,198	31,655	28,093		27,356	25,730	

Certain inshore boats were able to fish for part of the season without a helper

Table 12 - Average net returns per man per day at sea - 1979

Region and type of boat	Crew Categories							
	Captain	Chief Engineer	Boatswain	Cook	Iceman	Skiff-man	Deck-hand	1st Helper
Inshore boats								
1- Stonehaven-Maisonnette	65.3							27.60
2- Caraquet	48.9							45.26
3- Lamèque-Shippegan	70.0							58.69
4- Val Comeau-Néguac	59.0							34.97
5- Baie Ste Anne	65.2							31.12
6- Richibucto	60.0							49.10
7- Cape Tourmentine	87.2							34.44
Offshore boats								
8- Crab boats	220.24						199.00	
9- Scottish seiners	158.78						158.78	
10- Shrimp boats	160.07	116.79		114.73	111.84		110.28	
11- Herring seiners	896.65	487.47	494.61	438.95		427.44	402.03	

b) Returns to capital

The average total of capital investment for each group studied is divided, according to Table 13, as follows:

- Original cost or cost of acquiring the boat.
- Purchases of electronic or other equipment, and all subsequent major improvements to the boat.
- Cost of fishing gear.
- Value of rented equipment, such as the Decca navigator.

It is obvious from this table, that because shrimp boats have the highest average age of all the groups of boats, the cost of equipment purchases or major improvements is greater ($34,677.00).

The method of financing the invested capital is indicated in Table 14. The financing provided by the N.B. Fisheries Development Board becomes increasingly important as the cost of the investment increases.

Table 13 - Average total cost of capital investment - 1979

Region and type of boat	Average cost of capital investment divided as follows:				
	Original cost or cost of acquisition (1)	Purchases or improvements	Cost of fishing gear	Value of rented equipment	Total cost of capital investment at the end of 1979
	$	$	$	$	$
Inshore boats					
1- Stonchaven-Maisonnette	7,092	1,198	9,550		17,840
2- Caraquet	19,601	7,358	11,490		38,449
3- Lamèque-Shippegan	10,698	19	9,461		20,178
4- Val Comeau-Néguac	8,585	1,276	8,576		18,437
5- Baie Ste Anne	10,324	745	11,575		22,644
6- Richibucto	13,960	197	11,433		25,590
7- Cape Tourmentine	12,280	160	8,030		20,470
Offshore boats					
8- Crab boats	169,146	3,430	37,703	9,250	219,529
9- Scottish seiners	241,274	9,668	13,639	5,667	270,248
10- Shrimp boats	194,386	34,677	21,049	8,000	258,112
11- Herring seiners	481,431	73,268	178,760	11,000	744,459

(1) Cost of fishing gear not included

Table 14 - Method of financing capital investment - 1979

Region and type of boat	Average cost of the investment financed by:						
	Fisherman		N.B. Fisheries Development Board				
	Cash Payment	Additionnal payment	Original loan	Additional loan	Federal subsidy	Rented equipment	Total capital cost
	$	$	$	$	$	$	$
Inshore boats							
1 Stonchaven-Maisonnette	6,539	10,664			637		17,840
2 Caraquet	8,740	14,768	7,809	4,080	3,052		38,449
3 Lamèque-Shippegan	1,270	10,492	6,246		2,170		20,178
4 Val Comeau Néguac	1,010	9,852	4,609		2,966		18,437
5 Baie Ste Anne	2,504	12,320	4,969		2,851		22,644
6 Richibucto	1,271	11,631	7,802		4,886		25,590
7 Cape Tourmentine	1,074	9,198	5,841		4,357		20,470
Offshore boats							
8 Crab boats	11,838	32,962	119,792	1,968	43,719	9,250	219,529
9 Scottish Seiners	13,382	4,672	159,751	6,329	80,447	5,667	270,248
10 Shrimp boats	13,292	17,593	176,856	26,008	16,363	8,000	258,112
11 Herring seiners	60,105	128,001	497,711	47,642		11,000	744,459

The net returns to capital constitue another useful measurement of profitability. Table 15 gives the rate of return for the various groups studied.

On the average, all the groups studied recorded a profit, with the exception of the herring boats from Caraquet region. The boats from Baie Ste Anne registered the highest net return with 32.1% of total investment and 36.7% of net investment.

Crab boats registered an average profit of $41,642.00 per boat, or 19.0% as the net return on total investment and 25.0% on net investment.

Scottish seiners registered an average net profit per boat of $27,325.00 with a return rate of 10.1% and 14.8% on total investment and net investment respectively.

Shrimp boats recorded an average net profit of $22,733.00 per boat, while herring seiners realized an average net profit of $62,924.00, that is, for these last ones a return rate of 8.5% and 8.6% on the total investment and net investment respectively.

Table 15 - Returns to capital for boats studied - 1979

Region and type of boat	Averages by region or type of boat				
	Total cost of investment	Net cost of (1) investment	Net profit or loss(2)	Average return rate on total investment (3)	Average return rate on net investment (3)
	$	$	$	%	%
Inshore boats					
1- Stonehaven Maisonnette	17,840	17,203	3,479	19.5	20.2
2- Caraquet	38,449	35,397	-2,472	Ø	Ø
3- Lamèque-Shippegan	20,178	18,008	2,313	11.5	12.8
4- Val Comeau-Néguac	18,437	15,471	3,625	19.7	23.4
5- Baie Ste Anne	22,644	19,793	7,265	32.1	36.7
6- Richibucto	25,590	20,704	4,433	17.3	21.4
7- Cape Tourmentine	20,470	16,114	1,401	6.8	8.7
Offshore boats					
8- Crab boats	219,529	166,561	41,642	19.0	25.0
9- Scottish seiners	270,248	184,134	27,325	10.1	14.8
10- Shrimp boats	258,112	233,750	22,733	8.8	9.7
11- Herring seiners	744,459	733,458	62,924	8.5	8.6

(1) Total cost of investment minus the federal subsidy and the value of rented equipment.

(2) Information from Tables 7a and 7b of the Appendix. The profits or losses indicated include the average salaries calculated for the captains of each group of inshore boats.

(3) When calculating the average rate of return the life expectancy of the boats for each group concerned was not considered.

Ø not applicable

5. RELATIONSHIP BETWEEN AVERAGE COST INCURRED AND THE PRICE RECEIVED PER POUND OF FISH.

It is impossible to determine the average cost per pound for each species of fish landed, because the boats operating do not concentrate on one species only. Hence, a total average cost is established for all species involved in each group studied.

Table 16 presents the relationship between this total average cost and the average price received.

Fishermen in the Val Comeau region realized the highest profit among the inshore boats per pound of fish landed, or an average net profit of 9.99¢ per pound of fish landed, whereas crab boats realized an average profit of 7.96¢ a pound, Scottish seiners 2.18¢ a pound, shrimp boats 2.65¢ a pound, and herring seiners 1.27¢ per pound of fish landed.

Table 16 - Relationship between the average cost and the price received per pound of fish - 1979

Region and type of boat	Averages by region or type of boat		
	Cost per pound of fish landed (1)	Price received per pound	Profit or loss per pound
	¢	¢	¢
Inshore boats			
1- Stonchaven-Maisonnette	27.89	34.75	6.86
2- Caraquet	16.09	14.33	- 1.76
3- Lamèque-Shippegan	36.86	39.66	2.80
4- Val Comeau-Néguac	53.23	63.22	9.99
5- Baie ste Anne	25.97	35.94	9.97
6- Richibucto	19.20	22.89	3.69
7- Cape Tourmentine	42.12	44.98	2.86
Offshore boats			
8- Crab boats	27.13	35.09	7.96
9- Scottish seiners	12.61	14.79	2.18
10- Shrimp bosts	22.78	25.43	2.65
11- Herring seiners	10.06	11.33	1.27

(1) Depreciation is included in the total costs, as are the average salaries calculated for the captains of inshore groups

6. AVERAGE PRICE REQUIRED TO BREAK EVEN

Tables 17 a and 17b indicate the sales of fish necessary (item 6), the price required per pound (item 9) and the necessary quantities (item 11, Table 17a and item 17, Table 17b) to break even, that is, to reach the point at which the enterprise does not make any profit or suffer any loss.

According to Table 17a, the prices necessary to break even, that is to be able to defray all costs incurred during the season, are, for the groups concerned, 27.89¢, 16.09¢, 35.00¢, 49.31¢, 25.72¢, 18.87¢ and 42.11¢ a pound respectively for the fish landed.

The methods of paying off the debts on inshore boats are sometimes irregular and often consist of the annual payment of fixed sums. And the prices to break even do not cover, in this case, the payments on the principal in order to reimburse the debt.

The landings required to attain the break-even point and to cover payments on the principal, according to Table 17b, are 450,271 pounds, 1,135,497 pounds, 853,740 pounds and 4,700,000 pounds respectively for crab boats, Scottish seiners, shrimp boats, and herring seiners.

This amount is less significant for shrimp boats because they include very different species (cod and shrimp). Herring seiners should have an average of 4,700,000 pounds or 2350 tons of fish landed per boat.

Table 17a - Average price required to break even - 1979

By region	1 Stonehaven Maisonnette	2 Caraquet	3 Lamèque Shippegan
1. Net income of boat	3,479	-2,472	2,313
2. Sale of fish	17,632	20,130	19,705
3. Other receipts			
4. Total receipts	17,632	20,130	19,705
5. Receipts required to break even (4-1)	14,153	22,602	17,392
6. Sales of fish required to break even (5-3)	14,153	22,602	17,392
7. Necessary ratio to sales of fish (6÷2)%	80.27	112.28	88.26
8. Price received per pound in ¢	34.75	14.33	39.66
9. Price required to break even (8 x 7)	27.89	16.09	35.00
10. Landings in pounds	50,744	140,453	47,181
11. Landings required to break even according to the price received (10 x 7) (1)	40,732	157,701	41,642

(1) Item 11, these amounts are not really applicable because the species are too different (lobster, cod, etc), but they may be valid for group 2 of the Caraquet region.

Table 17a - (continued) Average price required to break even - 1979

By region	4 Val Comeau Néguac	5 Baie Ste Anne	6 Richibucto	7 Cape Tourmentine
1. Net income of boat	3,625	7,265	4,433	1,401
2. Sale of fish	16,467	25,532	25,241	22,008
3. Other receipts	1,023	184	365	
4. Total receipts	17,490	25,716	25,606	22,008
5. Receipts required to break even (4-1)	13,865	18,451	21,173	20,607
6. Sales of fish requires to break even (5-3)	12,842	18,267	20,808	20,607
7. Necessary ratio to sales of fish (6÷2)%	77.99	71.55	82.44	93.63
8. Price received per pound in ¢	63.22	35.94	22.89	44.98
9. Price requires to break even (8 x 7)	49.31	25.72	18.87	42.11
10. Landings in pounds	26,049	71,046	110,292	48,924
11. Landings required to break even according to the price received (10 x 7) (1)	20,316	50,833	90,925	45,808

(1) Item 11, these amounts are not really applicable because the species are too different (lobster, cod, etc.), but they may be valide for group 2 of the Caraquet region.

Table 17b - Average price required to break even - 1979

Type of boat	8 Crab boats	9 Scottish Seiners	10 Shrimp boats	11 Herring Seiners
1. Net income of boat	41,642	27,325	22,733	62,924
2. Sale of fish	183,734	184,880	217,999	562,382
3. Other receipts		83		54
4. Total receipts	183,734	184,963	217,999	562,436
5. Receipts required to break even (4-1)	142,092	157,638	195,266	499,512
6. Sales of fish required to break even (5-3)	142,092	157,555	195,266	499,458
7. Necessary ratio to sales of fish (6÷2)%	77.34	85.22	89.57	88.81
8. Price received per pound in ¢	35.09	14.79	25.43	11.33
9. Price required to break even (8x7)	27.14	12.60	22.78	10.06
10. Payment on principal (1)	15,908	10,385	21,840	33,052
11. Losses				
12. Total (10 plus 11)	15,908	10,385	21,840	33,052
13. Receipts required to break even and cover payment on the principal as well as the losses (5 plus 12)	158,000	168,023	217,106	532,564
14. Necessary ratio (13÷5)	111.20	106.59	111.18	106.62
15. Price required to break even and cover payment on the principal as well as the losses (9 x 14)	30.18	13.43	25.33	10.73
16. Landings in pounds	523,665	1,249,711	857,123	4,964,060
17. Landings required to break even according to the price received (16,x 7) (2)(3)	405,003	1,065,004	767,123	4,408,582
18. Landings required to break even and cover payment on the principal as well as the losses according to the price received (2)(3)	450,271	1,135,497	853,740	4,700,000

(1) Item 10 includes payments on the principal in order to reimburse the mortgage as well as other debts.

(2) Items 17 and 18 take into consideration other fishing receipts.

(3) Amount not really applicable to shrimp boats because of highly different species (cod, shrimp, etc.)

APPENDIX

Table 1(a) - Summary of fishing activities and financial outcome in 1979

Region and type of boat	Averages for inshore boats		
	Stonehaven Maisonnette	Caraquet	Lamèque Shippegan
	weeks	weeks	weeks
Fishing season	20	14	18
Number of men in crew	2.00	3.58	2.00
Number of trips	88	58	75
Days at sea	88	87	75
Days fished	88	58	75
Hours fished	687	266	665
Landings in pounds	50,744	140,453	47,181
Landed values ($)	17,632	20,130	18,713
Price in cents per pound	34.75	14.33	39.66
Total receipts ($)	17,632	20,130	19,705
Total cash expenditures ($)	5,263	8,102	6,656
Net crew earnings (1)($)	8,179	12,657	9,987
Net cash boat share ($)	4,189	- 629	3,062
Depreciation ($)	710	1,843	749
Net profit or loss ($)	3,479	- 2,472	2,313
Total number of boats	6	3	4
Number showing a net profit	6	1	2
Number showing a net loss	-	2	2

(1) Includes salaries of helpers as well as average salaries calculated for captains

Table 1(a) - Summary of fishing activities and financial outcome in 1979 (continued)

Region or type of boat	Averages for inshore boats			
	Val Comeau Neguac	Baie Ste Anne	Richibucto	Cape Tourmentine
	weeks	weeks	weeks	weeks
Fishing season	14	21	21	27
Number of men in crew	2.00	2.32	2.13	2.25
Number of trips	72	92	100	86
Days at sea	72	92	100	86
Days fished	72	92	100	86
Hours fished	572	704	794	995
Landings in pounds	26,049	71,046	110,292	48,924
Landed values ($)	16,467	25,532	25,241	22,008
Price in cents per pound	63.22	35.94	22.89	44.98
Total receipts ($)	17,490	25,716	25,606	22,008
Total cash expenditures ($)	6,510	7,516	9,351	7,922
Net crew earnings (1)($)	6,768	10,185	11,043	12,012
Net cash boat share ($)	4,212	8,015	5,212	2,074
Depreciation ($)	587	750	779	673
Net profit or loss ($)	3,625	7,265	4,433	1,401
Total number of boats	5	3	3	3
Number showing a net profit	2	3	3	2
Number showing a net loss	3	-	-	1

(1) Includes salaries of helpers as well as average salaries calculated for the captains

Table 1(b) - Summary of fishing activities and financial outcome in 1979

Type of boat	Averages for offshore boats			
	Crab boats	Scottish Seiners	Shrimp boat	Herring seiners
	weeks	weeks	weeks	weeks
Fishing season	22	30	31	15
Number of men in crew	4.0	4.8	4.3	8.7
Number of trips	40	33	18	38
Days at sea	103	120	153	64
Days fished	63	91	118	52
Hours fished	933	1,378	1,794	(1)
Landings in pounds	523,665	1,249,711	857,124	4,964,060
Landed values ($)	183,734	184,880	217,999	562,382
Price in cents per pound	35.09	14.79	25.43	11.33
Total receipts ($)	183,734	184,963	217,999	562,436
Total cash expenditures	46,662	55,368	96,920	183,856
Net crew earnings (2)($)	85,547	89,208	82,201	266,766
Net cash boat share ($)	51,526	40,388	38,878	111,814
Depreciation ($)	9,883	13,062	16,145	48,890
Net profit or loss ($)	41,642	27,326	22,733	62,924
Total number of boats	4	3	4	3
Number showing a net profit	4	3	3	2
Number showing a net loss			1	1

(1) not available

(2) including net cash crew shares and commissions

Table 2(a) - Average landings per species - 1979 - inshore boats

Species	Averages by region						
	Stonehaven-Maisonnette	Caraquet	Lamèque Shippegan	Val Comeau Néguac	Baie Ste Anne	Richi-bucto	Cape Tourmentine
	lbs	lbs	lbs	lbs	lbs	lbs	lbs
Lobster	7,560		7,444	8,574	9,219	7,639	5,818
Herring	19,028	127,120	17,966	913	48,771	44,667	
Mackerel	18,766		11,002	14,111	6,919		1,250
Cod	1,096	13,333	6,954	580	742	28,849	
Plaice	1,095		662	23	366		13,895
Hake	545		3,077	784	4,769		25,214
Shad	5			Ø	11		
Salmon	12		36	23	227	30	
Alewife	2,637		40	815	22	28,084	
Skate				7			
Scallop						1,023	2,531
Scallop roe							216
Unclassified				220			
Totals	50,744	140,453	47,181	26,049	71,046	101,292	48,924

Ø less than one half of one unit

Table 2(b) - Average landings per species - 1979 offshore boats

Type of boat	Averages			
	Crab boats	Scottish seiners	Shrimp boats	Herring seiners
	lbs	lbs	lbs	lbs
Species				
Cod		932,682	223,865	
Haddock		5,112	705	
Pollock			404	
Hake		28,217	2,709	
Halibut			191	
Turbot			25,397	
Plaice		281,582	105,492	
Catfish			62	
Redfish			83,904	
Herring				4,901,580
Caplin				45,140
Shrimp			404,430	
Crab	523,665			
Unclassified		2,118	9,965	17,340
Totals	523,665	1,249,711	857,124	* 4,964,060

* which represents 2,482.03 tons

Table 3(a) - Average landed values per species - 1979 inshore boats

Species	Averages by region						
	Stonehaven Maisonnette	Caraquet	Lamèque Shippegan	Val Comeau Néguac	Baie Ste Anne	Richi-bucto	Cape Tourmentine
	$	$	$	$	$	$	$
Lobster	12,558		12,314	14,481	15,337	11,508	9,425
Herring	2,485	17,997	2,767	74	7,637	4,467	
Mackerel	2,055		1,374	1,562	887		125
Cod	203	2,133	1,555	140	163	4,686	
Plaice	131		83	2	55		1,405
Hake	62		544	131	906		2,854
Shad	3			Ø	3		
Salmon	29		73	48	544	75	
Alewife	106		3	24	1	1,179	
Skate				1			
Scallop						3,326	7,658
Scallop roe							541
Unclassified				4			
Totals	17,632	20,130	18,713	16,467	25,532	25,241	22,008

Ø less than one half of one unit

Table 3(b) - Average landed values per species - 1979 offshore boats

Type of boat	Averages			
	Crab boats	Scottish seiners	Shrimp boats	Herring seiners
	$	$	$	$
Species				
Cod		145,409	34,553	
Haddock		1,369	177	
Pollock			37	
Hake		1,996	244	
Halibut			292	
Turbot			2,448	
Plaice		36,098	12,847	
Catfish			6	
Redfish			10,887	
Herring				561,020
Caplin				1,015
Shrimp			156,355	
Crab	183,734			
Unclassified		8	153	347
Totals	183,734	184,880	217,999	562,382

Table 4(a) - Average prices received per species - 1979 - inshore boats (in cents per pound)

Species	Averages by region						
	Stonehaven Maisonnette	Caraquet	Lamèque Shippegan	Val Comeau Néguac	Baie Ste Anne	Richibucto	Cape Tourmentine
Lobster	166.11		165.42	168.89	166.36	150.65	162.00
Herring	13.06	14.16	15.40	8.11	15.66	10.00	
Mackerel	10.95		12.49	11.07	12.82		10.00
Cod	18.52	16.00	22.36	24.14	21.97	16.24	
Plaice	11.96		12.54	8.70	15.03		10.11
Hake	11.38		17.68	16.71	19.00		11.32
Shad	0.60				27.27		
Salmon	241.67		202.78	208.70	239.65	250.00	
Alewife	4.02		7.50	2.94	4.55	4.20	
Skate				14.29			
Scallop						325.12	302.57
Scallop roe							250.46
Unclassified				1.82			
All species	34.75	14.33	39.66	63.22	35.94	22.89	44.98

Table 4(b) - Average prices received per species - 1979 - offshore boats (in cents per pound)

Type of boat	Averages			
	Crab boats	Scottish seiners	Shrimp boats	Herring seiners
Species				
Cod		15.59	15.43	
Haddock		26.78	25.11	
Pollock			9.16	
Hake		7.07	9.01	
Halibut			152.88	
Turbot			9.64	
Plaice		12.82	12.18	
Catfish			9.68	
Redfish			12.98	
Herring				11.45
Caplin				2.25
Shrimp			38.66	
Crab	35.09			
Unclassified		0.38	1.54	2.00
All species	35.09	14.79	25.43	11.33

Table 5(a) - Percentage distribution of total landings per species - 1979 - inshore boats

Species	Averages by region						
	Stonehaven Maisonnette	Caraquet	Lamèque Shippagan	Val Comeau Néguac	Baie Ste Anne	Richi-bucto	Cape Tourmentine
	%	%	%	%	%	%	%
Lobster	14.9		15.8	32.9	13.0	6.9	11.9
Herring	37.5	90.5	38.1	3.5	68.7	40.5	
Mackerel	37.0		23.3	54.2	9.8		2.6
Cod	2.2	9.5	14.7	2.2	1.0	26.2	
Plaice	2.1		1.4	0.1	0.5		28.4
Hake	1.1		6.5	3.0	6.7		51.5
Shad	Ø			Ø	Ø		
Salmon	Ø		0.1	0.1	0.3	Ø	
Alewife	5.2		0.1	3.1	Ø	25.5	
Skate				Ø			
Scallop						0.9	5.2
Scallop roe							0.4
Unclassified				0.9			
Total landings	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Ø less than one half of one unit

Table 5(b) - Percentage distribution of total landings per species - 1979 - offshore boats

Type of boat	Averages			
	Crab boats	Scottish seiners	Shrimp boats	Herring seiners
	%	%	%	%
Species				
Cod		74.6	26.1	
Haddock		0.4	0.1	
Pollock			0.1	
Hake		2.3	0.3	
Halibut			Ø	
Turbot			3.0	
Plaice		22.5	12.3	
Catfish			Ø	
Redfish			9.8	
Herring				98.7
Caplin				0.9
Shrimp			47.2	
Crab	100.0			
Unclassified		0.2	1.1	0.4
Total landings	100.0	100.0	100.0	100.0

Ø less than one half of one unit

Table 6(a) - Percentage distribution of total landed value per species - 1979 - inshore boats

Species	Averages by region						
	Stonehaven Maisonnette	Caraquet	Lamèque Shippagan	Val Comeau Néguac	Baie Ste Anne	Richi-bucto	Cape Tourmentine
	%	%	%	%	%	%	%
Lobster	71.2		65.8	87.9	60.1	45.6	42.8
Herring	14.1	89.4	14.8	0.4	29.9	17.7	
Mackerel	11.7		7.3	9.5	3.5		0.6
Cod	1.2	10.6	8.3	0.9	0.6	18.5	
Plaice	0.7		0.5	Ø	0.2		6.4
Hake	0.3		2.9	0.8	3.6		13.0
Shad	Ø			Ø	Ø		
Salmon	0.2		0.4	0.3	2.1	0.3	
Alewife	0.6		Ø	0.2	Ø	4.7	
Skate				Ø			
Scallop						13.2	34.8
Scallop roe							2.4
Unclassified				Ø			
Total landed value	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Ø less than one half of one unit

Table 6(b) - Percentage distribution of total landed value per species - 1979 - offshore boats

Type of boat	Averages			
	Crab boats	Scottish seiners	Shrimp boats	Herring seiners
	%	%	%	%
Species				
Cod		78.7	15.9	
Haddock		0.7	0.1	
Pollock			Ø	
Hake		1.1	0.1	
Halibut			0.1	
Turbot			1.1	
Plaice		19.5	5.9	
Catfish			Ø	
Redfish			5.0	
Herring				99.7
Caplin				0.2
Shrimp			71.7	
Crab	100.0			
Unclassified			0.1	0.1
Total landed value	100.0	100.0	100.0	100.0

Ø less than one half of one unit

Table 7(a) - Average receipts, expenses and net returns for inshore boats - 1979

By region	Averages		
	Stonehaven Maisonnette	Caraquet	Lamèque-Shippegan
Size	30	47	35
	$	$	$
Receipts			
Sale of fish	17,632	20,130	19,705
Other receipts			
Total receipts	17,632	20,130	19,705
Expenses			
Maintenance and Repairs			
Hull	293	594	639
Engine	320	1,090	438
Winch	47	47	95
Fishing gear	1,182	952	883
Electronic equipment	10	764	76
Subtotal	1,852	3,447	2,131
Other operating expenses			
Fuel	829	1,098	899
Bait	960		1,158
Ice		57	1
Provisions	420	660	531
Salaries	28	50	18
Wharfage	41	134	65
Miscellaneous	1,033	1,280	1,197
Subtotal	3,311	3,279	3,869
Fixed charges			
Marine Insurance	7	596	141
Workmen's Compensation			
Rentals			
Interest		691	450
Other	94	89	65
Subtotal	101	1,376	656
Total cash expenses	5,264	8,102	6,656
Net cash returns to Labour and capital	12,368	12,028	13,049
(1) Net crew earnings			
Net crew share (1)	8,179	12,657	9,987
Commissions			
Subtotal	8,179	12,657	9,987
(2) Net boat share	4,189	- 629	3,062
Less depreciation (2)	710	1,843	749
Net income of boat	3,479	-2,472	2,313

(1) includes salaries of helpers as well as average salaries calculated for captains.

(2) depreciation calculated at 7½% annually.

Table 7(a) - Average receipts, expenses and net returns for inshore boats - 1979 - (continued)

By region	Averages			
	Val Comeau Néguac	Baie Ste Anne	Richibucto	Cap Tourmentine
Size	44	40	43	44
Receipts				
Sale of fish	16,467	25,532	25,241	22,008
Other receipts	1,023	184	365	
Total receipts	17,490	25,716	25,606	22,008
Expenses				
Maintenance and Repairs				
Hull	442	684	1,071	366
Engine	682	411	550	434
Winch	101		83	422
Fishing gear	798	662	1,797	775
Electronic equipment	5	39	46	
Subtotal	2,028	1,796	3,547	1,997
Other operating expenses				
Fuel	1,229	1,313	1,853	2,005
Bait	798	1,203	831	1,137
Ice		2		
Provisions	840	963	907	754
Salaries	28	35	41	35
Wharfage	56	116	70	70
Miscellaneous	1,137	1,605	1,492	1,474
Subtotal	4,088	5,237	5,194	5,475
Fixed charges				
Marine Insurance	154	176	198	191
Workmen's Compensation				
Rentals				
Interest	165	252	287	219
Other	75	55	125	40
Subtotal	394	483	610	450
Total cash expenses	6,510	7,516	9,351	7,922
Net cash returns to Labour and capital	10,980	18,200	16,255	14,086
(1) Net crew earnings				
Net crew share (1)	6,768	10,185	11,043	12,012
Commissions				
Subtotal	6,768	10,185	11,043	12,012
(2) Net boat share	4,212	8,015	5,212	2,074
Less depreciation (2)	587	750	779	673
Net income of boat	3,625	7,265	4,433	1,401

(1) includes salaries of helpers as well as average salaries calculated for captains

(2) depreciation calculated at 7½% annually.

Table 7(b) - Average receipts, expenses and net returns for offshore boats - 1979

Type of boat	Averages			
	Crab boats	Scottish seiners	Shrimp boats	Herring seiners
Size	64	64	85	106
	$	$	$	$
Receipts				
Sale of fish	183,734	184,880	217,999	562,382
Other receipts		83		54
Total receipts	183,734	184,963	217,999	562,436
Expenses				
Maintenance and Repairs				
Hull	2,282	5,287	6,975	22,912
Engine	1,894	5,740	8,369	14,792
Winch	268	1,196	3,844	19,431
Fishing gear	3,692	5,860	4,559	13,003
Electronic equipment	941	1,685	1,373	4,282
Subtotal	9,077	19,768	25,120	74,420
Other operating expenses				
Fuel	8,694	8,831	36,855	30,929
Bait	8,974			
Ice	1,538	2,705	6,575	540
Provisions	2,746	4,092	4,011	5,995
Salaries	293	455	608	995
Wharfage	189	61	210	599
Miscellaneous	2,591	2,390	2,991	12,012
Subtotal	25,025	18,534	51,250	51,070
Fixed charges				
Marine Insurance	4,335	4,942	6,984	17,353
Workmen's Compensation	425	446	694	699
Fees-Seiners' Assocation				9,745
Rentals	965	982	1,476	1,896
Interest	6,274	10,004	10,598	27,937
Other	561	692	798	736
Subtotal	12,560	17,066	20,550	58,366
Total cash expenses	46,662	55,368	96,920	183,856
Net cash returns to Labour and capital	137,072	129,595	121,079	378,580
(1) Net crew earnings				
Net crew share	83,360	89,208	72,668	218,751
Commissions	2,187		9,533	48,015
Subtotal	85,547	89,208	82,201	266,766
(2) Net boat share	51,525	40,387	38,878	111,814
Less depreciation (1)	9,883	13,062	16,145	48,890
Net income of boat	41,642	27,325	22,733	62,924

(1) Depreciation calculated at 7½% annually.

Table 8(a) - Percentage distribution of average total receipts for inshore boats - 1979

By region	Averages		
	Stonehaven Maisonnette	Caraquet	Lamèque Shippegan
Size	30	47	35
	%	%	%
Receipts			
Sale of fish	100.0	100.0	95.0
Other receipts			5.0
Total receipts	100.0	100.0	100.0
Expenses			
Maintenance and Repairs			
Hull	1.6	3.0	3.2
Engine	1.8	5.4	2.2
Winch	0.3	0.2	0.5
Fishing gear	6.7	4.7	4.5
Electronic equipment	0.1	3.8	0.4
Subtotal	10.5	17.1	10.8
Other operating expenses			
Fuel	4.7	5.5	4.6
Bait	5.4		5.9
Ice		0.3	Ø
Provisions	2.4	3.3	2.7
Salaries	0.2	0.2	0.1
Wharfage	0.2	0.7	0.3
Miscellaneous	5.9	6.3	6.0
Subtotal	18.8	16.3	19.6
Fixed charges			
Marine Insurance	0.1	3.0	0.7
Workmen's Compensation			
Rentals			
Interest		3.4	2.3
Other	0.5	0.4	0.3
Subtotal	0.6	6.8	3.3
Total cash expenses	29.9	40.2	33.7
Net cash returns to Labour and capital	70.1	59.8	66.3
(1) Net crew earnings			
Net crew share	46.4	62.9	50.7
Commissions			
Subtotal	46.4	62.9	50.7
(2) Net boat share	23.7	- 3.1	15.6
Less depreciation	4.0	9.2	3.8
Net income of boat	19.7	-12.3	11.8

Ø not applicable

Table 8(a) - Percentage distribution of average total receipts for inshore boats - 1979 - continued

By region	Averages			
	Val Comeau Néguac	Baie Ste Anne	Richibucto	Cape Tourmentine
Size	44	40	43	44
	%	%	%	%
Receipts				
Sale of fish	94.2	99.3	98.6	100.0
Other receipts	5.8	0.7	1.4	
Total receipts	100.0	100.0	100.0	100.0
Expenses				
Maintenance and Repairs				
Hull	2.5	2.7	4.2	1.7
Engine	3.9	1.6	2.1	2.0
Winch	0.6		0.3	1.9
Fishing gear	4.6	2.6	7.0	3.5
Electronic equipment	Ø	0.1	0.2	
Subtotal	11.6	7.0	13.8	9.1
Other operating expenses				
Fuel	7.0	5.1	7.2	9.1
Bait	4.6	4.7	3.2	5.2
Ice		Ø		
Provisions	4.8	3.7	3.6	3.4
Salaries	0.2	0.1	0.2	0.2
Wharfage	0.3	0.5	0.3	0.3
Miscellaneous	6.5	6.2	5.8	6.7
Subtotal	23.4	20.3	20.3	24.9
Fixed charges				
Marine Insurance	0.9	0.7	0.8	0.8
Workmen's Compensation				
Rentals				
Interest	0.9	1.0	1.1	1.0
Other	0.4	0.2	0.5	0.2
Subtotal	2.2	1.9	2.4	2.0
Total cash expenses	37.2	29.2	36.5	36.0
Net cash returns to Labour and capital	62.8	70.8	63.5	64.0
(1) Net crew earnings	38.7	39.6	43.1	54.6
Net crew share				
Commissions				
Subtotal	38.7	39.6	43.1	54.6
(2) Net boat share	24.1	31.2	20.4	9.4
Less depreciation	3.4	2.9	3.1	3.0
Net income of boat	20.7	28.3	17.3	6.4

Ø not applicable

Table 8(b) - Percentage distribution of average total receipts for offshore boats - 1979

Type of boat	Averages			
	Crab boats	Scottish seiners	Shrimp boats	Herring seiners
Size	64	64	85	106
	%	%	%	%
Receipts				
Sale of fish	100.0	99.9	100.0	100.0
Other receipts		0.1		
Total receipts	100.0	100.0	100.0	100.0
Expenses				
Maintenance and Repairs				
Hull	1.3	2.9	3.2	4.1
Engine	1.0	3.1	3.8	2.6
Winch	0.2	0.6	1.8	3.4
Fishing gear	2.0	3.2	2.1	2.3
Electronic equipment	0.5	0.9	0.6	0.8
Subtotal	5.0	10.7	11.5	13.2
Other operating expenses				
Fuel	4.7	4.8	16.9	5.5
Bait	4.9			
Ice	0.8	1.4	3.0	0.1
Provisions	1.5	2.2	1.8	1.1
Salaries	0.2	0.2	0.3	0.2
Wharfage	0.1	0.1	0.1	0.1
Miscellaneous	1.4	1.3	1.4	2.1
Subtotal	13.6	10.0	23.5	9.1
Fixed charges				
Marine Insurance	2.4	2.7	3.2	3.1
Workmen's Compensation	0.2	0.2	0.3	0.1
Fees-Seiners' Assocation				1.8
Rentals	0.5	0.5	0.7	0.3
Interest	3.4	5.4	4.8	5.0
Other	0.3	0.4	0.4	0.1
Subtotal	6.8	9.2	9.4	10.4
Total cash expenses	25.4	29.9	44.4	32.7
Net cash returns to Labour and capital	74.6	70.1	55.6	67.3
(1) Net crew earnings				
Net crew share	45.4	48.2	33.3	38.9
Commissions	1.2		4.4	8.5
Subtotal	46.6	48.2	37.7	47.4
(2) Net boat share	28.0	21.9	17.9	19.9
Less depreciation (1)	5.4	7.1	7.4	8.7
Net income of boat	22.6	14.8	10.5	11.2